# Armed Forces College of Medicine
## AFCM

# Cardiopulmonary module

## Clinical Integrated Cases
## Pretest 5

# Question 1

**During light microscopic examination of the heart, you note some fibers that has larger diameter than the surrounding cardiac muscle and have vacuolated cytoplasm. Why do you think these fibers appear paler than the surrounding fibers?**

A. Because they contain well developed sER
B. Because they are studied with fat droplets
C. Because they are rich in glycogen granules
D. Because they have myoglobin
E. Because they contain many lysosomes

# Question 2

**In which layer of the wall of the heart could you search for the Purkinje fibers?**

A. At site of entry of large vessels.
B. In between myocardial cells.
C. Subendocardial connective tissue.
D. Underneath the visceral layer of the epicardium.
E. At the apex of the heart.

# Question 3

**Auscultation of the third heart sound in an adult patient is a sign of heart failure. Which of the following phases of the cardiac cycle this sound may be heard?**

a. Atrial systole.
b. Isovolumetric contraction.
c. Isovolumetric relaxation.
d. Rapid filling.
e. Reduced filling.

# Question 4

**Which of the following is increased in a patient with heart failure?**

a. Atrial pressure.
b. Stroke volume.
c. Cardiac output.
d. Ejection fraction.
e. Cardiac contractility.

# Question 5

**Which of the following is the most serious adverse effect of ramipril?**

a) First dose hypotension
b) Cough
c) Angioedema
d) Hyperkalemia
e) Metallic taste

# Question 6

**Which of the following is true regarding ARNI used in cases of heart failure?**

a) It's a phosphodiesterase III Inhibitor
b) It's a sodium glucose transporters 2 inhibitor
c) It's a strong inotropic drug
d) It's a combination of sacubitril and valsartan
e) It resensitizes the downregulated $\beta_1$ receptors

# Question 7

**A 55-year-old woman with a history of myocardial infarction (MI) in the area of distribution of the left anterior descending artery (LAD) presents to her cardiologist because of fatigue, orthopnea, nocturnal dyspnea, weight gain, and "swollen ankles." Echocardiography reveals normal timing of the cardiac cycle and normal cardiac valves. Which of the following would most likely be heard in this patient on auscultation?**

(A) Holosystolic, harsh-sounding murmur, loudest at tricuspid area
(B) Paradoxically split S2
(C) Pulmonary flow murmur
(D) S3
(E) S4

# Question 8

**A 50 years old male patient, with history of anterior MI and coronary stenting one year ago, presented with dyspnea on less than the ordinary effort and lower limb edema, he can't sleep while the bed is flat. The first and most important to do in that patient is?**

A-Assurance

B-Life style modification

C-Consult the chest department

D-Perform Echocardiography to assess the ejection fraction

E-Perform cardiac catheterization

# Question 9

**A patient who is known to be cardiac, presented to your outpatient clinic , complaining that he can't sleep flat in bed and he uses three pillows under his back , getting up many times a night , seeking for air , coughing of frothy sputum.**

**What medical term will you use to describe the patient complaint?**

A-He is Platypnic

B-He is Orthopnic

C-He is Choking

D-He is Asthmatic

E-He is Trepopnic

# Question 10

**Which of the following drugs is considered one of the corner stone treatment in HF treatment :**

a. ACEIs

b. Aspirin

c. Clopidogrel

d. Ca channel blockers

e- Warfarin

# Question 11

**Which of the following drugs is considered one of the corner stone treatment in HF treatment :**

a-Beta blockers

b-NSAIDS

c-Clopidogrel

d-Warfarin

e-Ca channel blockers

# Question 12

**The following is a risk factor for the development of heart failure:**

A) Previous myocardial infarction
B) Presence of patent foramen ovale
C) Infrequent atrial premature beats
D) Hyperparathyroidism
E) Cancer prostate

# Question 13

**The following is a second line treatment in the management of heart failure:**

A) MRA

B) ACEI

C) B Blockers

D) ARNI

E) Ivabradine

# Question 14

A 69-year-old woman is brought to the emergency department because of shortness of breath, swelling of the legs, and generalized weakness. Medical history is remarkable for poorly controlled hypertension and a myocardial infarction three years ago. She states that her physician recently started her on a third antihypertensive medication. To listen to the cardiac auscultation, a 3rd heart sound is heard Which of the following medications is most likely to have caused this patient's symptoms?

- A. Amlodipine
- B. Enalapril
- C. Furosemide
- D. Spironolactone
- E. Verapamil

Thank
you